Public Meeting Hazard Mitigation Plan Development

City of Framingham
July 11, 2022, via Zoom

Translated Slides

Portuguese:

https://www.framinghamma.gov/HMPMeeting1-Portuguese

Spanish:

https://www.framinghamma.gov/HMPMeeting1-Spanish

Jamie Caplan Consulting LLC

History of success in MA

- Commonwealth of MA (State Plan)
- City of Pittsfield (MVP/HMP)
- Town of Becket (MVP/HMP)
- Town of Blandford (HMP)
- Town of Dighton (MVP/HMP)
- Town of Dracut (MVP/HMP)
- Town of Fairhaven (MVP/HMP)
- Town of Lexington (MVP/HMP)
- Town of Ludlow (HMP)
- Town of North Reading (HMP)
- Town of South Hadley (HMP)
- Town of Wilmington (MVP/HMP)
- UMASS Amherst (HMP)

- Territory of American Samoa
- County of Maui
- American Indian Tribes
- South Central Region of Connecticut
- Towns in Vermont
- FEMA Mitigation Planning Support



Jamie Caplan, Project Manager



Darrin Punchard, Deputy Project Manager



Bill Bohn, Risk Assessment Lead



David Murphy, Mitigation
Specialist

Hazard Mitigation

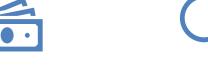


six dollars U.S. saves in future costs

 A sustained action to reduce or eliminate risk to people and property from natural hazards and their effects.

Benefits of Mitigation Planning









Identify costeffective actions to reduce risk

Focus resources on greatest vulnerabilities

Build partnerships

Increase awareness of hazards and risk







Communicate priorities

Align with other town objectives

Save lives and money!

Phases of Emergency Management



FEMA Mitigation Funding

- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)
- Hazard Mitigation Grant Program (HMGP)
 - Only available after a Presidential Disaster Declaration

Acquisition

Floodwalls, Floodproofing

Elevating structures

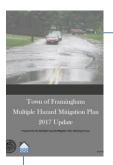
Structural retrofits

Utility retrofits

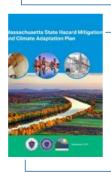
Slope stabilization

Drainage improvement

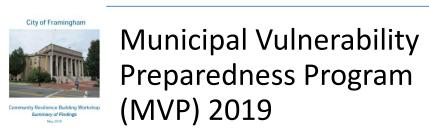
Hazard Mitigation Plan Development



Town of Framingham Hazard Mitigation Plan 2017 Update



State Hazard Mitigation and Climate Adaptation Plan 2018



2022 City of Framingham Hazard Mitigation Plan



Hazard Mitigation Planning Committee (HMPC)



Provide supporting data or information.



Assist in the identification and prioritization of mitigation actions.



Review and comment on the draft plan.



Approve final draft for submission to MEMA.

What buildings, organizations, and infrastructure do these people rely on?

Critical Facilities - sample

- Memorial Building/City Hall
- Public Libraries
- State Police Headquarters
- Metro West Medical Center
- MEMA Headquarters
- CPFM Headquarters
- Framingham Emergency Operations Center
- Fire Department
- Public Works

- Schools
- Callahan Senior Center
- Police Headquarters
- Framingham Housing Authority
- Assisted Living and Nursing centers
- Framingham State University
- Helipads
- Reservoir Dams
- Water and Sewer Infrastructure
- Pumping Stations

What weather related hazards impact these people and/or buildings, organizations and infrastructure?

Hazards for Framingham's Hazard Mitigation Plan Update

Primary Climate Change Interactions	Natural Hazards
Changes in Precipitation	 Flooding (includes riverine, dam failures, ice jams, etc.) Drought Landslide Sinkholes
Rising Temperatures	 Extreme Temperatures Wildfires Invasive Species Infectious Disease
Extreme Weather	 Hurricanes/Tropical Storms Severe Winter Storm/Nor'easter (includes blizzard, ice storm, etc.) Tornadoes Other Severe Weather (includes thunderstorms, etc.)
Non-Climate Influenced Hazards	• Earthquake

Risk Assessment Process

NATURAL HAZARD

Consideration includes history, location, extent and future probability





The potential for damage, loss, or other impacts created by the interaction of natural hazards with critical facilities

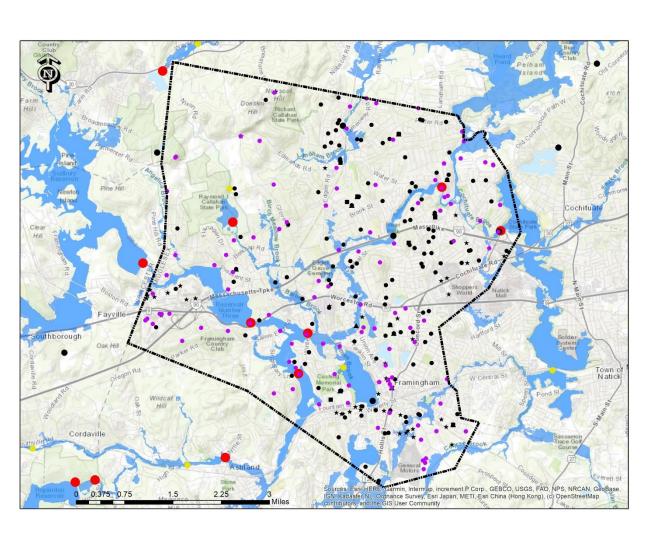
RISK

CRITICAL FACILITIES

Assets of the built environment that provide services which are essential for life and economic viability



Critical Facilities and Floodplains



Floodplain Source: FEMA

Legend



Framingham

- Critical Facilities
- ▲ School
- Shelters
- Special Populations
- ★ Tier 2 Chemicals

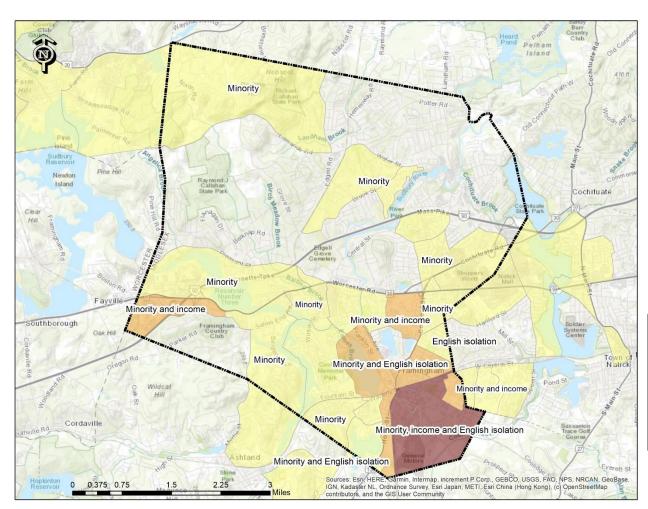
Dams

Hazard Code

- High Hazard
- Significant Hazard
- Low Hazard
- N/A

100-year Floodplain

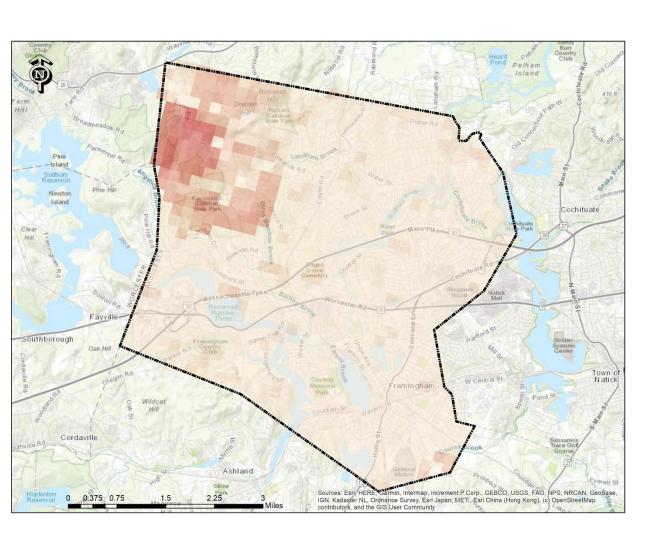
Environmental Justice Communities



Source:
Massachusetts
Office of Energy and
Environmental
Affairs



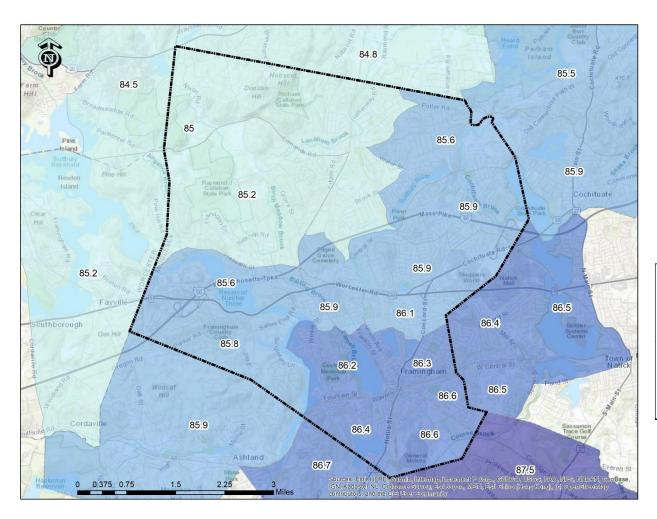
Wildfire Probability



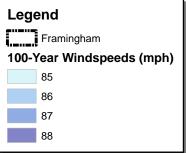
Source: United States Forest Service



100-Year Windspeeds



Source: ASCE 7-98



What can be done to lessen the impact of the hazards to protect people and property?

A Range of Mitigation Actions

1. Local Plans and Regulations

- Comprehensive plans
- Land use ordinances
- Development review
- Building codes and enforcement
- Capital improvement programs
- Open space preservation
- Stormwater management regulations and master plans

Structure and Infrastructure Projects

- Acquisitions and elevations of structures in flood-prone areas
- Utility undergrounding
- Structural retrofits
- Floodwalls and retaining walls
- Detention and retention structures
- Culverts

3. Natural Systems Protection

- Sediment and erosion control
- Stream corridor restoration
- Forest management
- Conservation easements
- Wetland restoration and preservation

4. Education and Awareness Programs

- Radio or television spots
- Websites with maps and information
- Real estate disclosure
- Presentations to school groups or neighborhood organizations
- Mailings to residents in hazardprone areas

Timeline

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Task 1. Convene Local HMPC		HMPC Meeting		HMPC Meeting		Public Meeting	HMPC Meeting			HMPC Meeting & Public Meeting	
Task 2. Update Hazard Profiles											
Task 3. Update Critical Facility Inventory											
Task 4. Update Mitigation Goals											
Task 5. Update Mitigation Actions											
Task 6. Plan Review, Evaluation, and Implementation											
Task 7. Public Review of Draft											
Task 8. Review and Approval											

Thank you

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